

Stand Alone Merging Unit (SAMU)

Intended for connecting conventional current and voltage transformers to digital protection, control and metering equipment in the substation through the IEC61850 Process Bus.



Fully digital Sampled Values are sent as per IEC61850-9-2LE or IEC 61869-9 requirements.

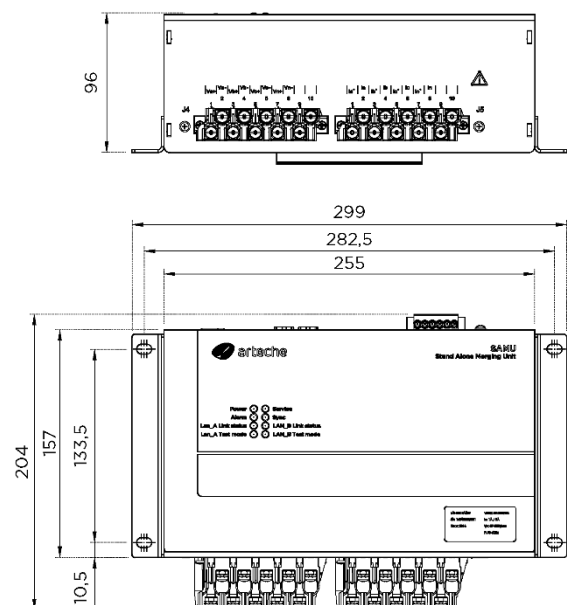
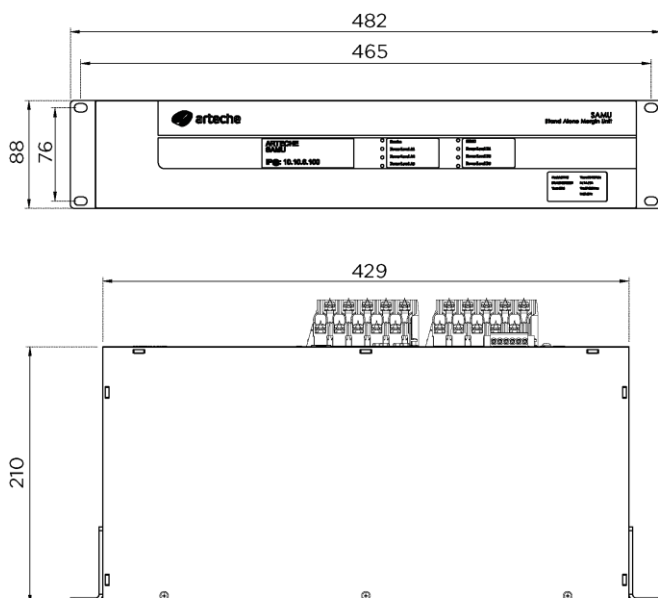
GENERAL FEATURES

- > 19" 2U Rack or Din Rail Mounted case with a weight of 3 KG.
- > Time Synchronization 1PPS and IEEE 1588 (PTP).
- > Network redundancy HSR & PRP.
- > Digital output via dual Ethernet port. Compliant with IEC 61850-9-2LE and IEC 61869-9.
- > Time sync:
 - > 1PPS input and PTP IEEE1588 (IEC61850-9-3).

INTERFACES

- > Input interfaces:
 - > 4 x Conventional VT.
 - > 4 x Conventional CT.
- > Digital output (sampled values):
 - > 2 x Ethernet 100FX Port Duplex LC connector.
- > Relay contact outputs.
- > 4x20 LCD display (available for the 19" model).
- > 8 LEDs for status indications & alarms.
- > Configuration port. Web based interface.
- > Power supply.

DIMENSIONS



TECHNICAL SPECIFICATIONS

SAMU DIN STAND ALONE MERGING UNIT			
MECHANICAL	Dimensions	19" Rack, 2U high 429mm x 88mm x 210mm (L x H x W) DIN rail / Wall mounted: 255mm x 96mm x 157mm	
	Weight	3 Kg	
ELECTRICAL	Voltage Range	100-230 Vac/Vdc	
	Max Current	100 mA	
	Power Consumption	Maximum 8W	
ENVIRONMENTAL	Operating Temperature	-40°C to +55°C	
	Storage Temperature	-40°C to +85°C	
	Humidity	90% Non-condensing	
	Maximum Altitude	2,000 m	
	Vibration	0.5 G	
INTERFACE WITH CONVENTIONAL INSTRUMENT TRANSFORMERS	ANALOG VOLTAGE INPUTS	Number of inputs	4
		Rated voltage	33 to 240V
		Accuracy	0.2
		Burden	< 0.5VA
		Thermal Withstand	300V continuously
	ANALOG CURRENT INPUTS	Number of inputs	4
		Rated current	1 A / 5 A
		Accuracy	0.2 s / P20
		Burden	< 0.5VA
		Thermal Withstand	20 A continuous & 500 A (for 1 s)
	OUTPUT CONTACTS	Number of outputs	1 NO/NC Watchdog
		Rated voltage	250VAC
		Max. switching voltage	400VAC
		Rated current	8A
	PROCESS BUS INTERFACES	Number of Ethernet ports	2 x 100BaseFX (LC connector)
Protocol		IEC 61850-9-2LE / IEC 61869-9	
Max. total number of SV streams		4	
Type of frames		F4000S1I4V4 (50 Hz), F4800S2I4V4 (50 Hz), F12800S8I4V4 (50 Hz), F14400S6I4V4 (50 Hz), F4800S1I4V4 (60 Hz), F4800S2I4V4 (60 Hz), F15360S8I4V4 (60 Hz), F14400S6I4V4 (60 Hz)	
Network redundancy		PRP/HSR	
SYNCHRONIZATION	Physical interface	1PPS (fiber SC connector, 820nm)	
	PTP	IEC 61850-9-3	
HMI	LEDs	8	
	Configuration port	100BaseTX	
	Configuration software	Web browser	
	Display (for 19" models)	4 x 20 alphanumerical	